

STATUS OF TYPE SPECIMENS OF
PLATYCEPHALUS RODERICENSIS CUVIER, 1829 AND
P. BORBONIENSIS CUVIER, 1829 (PISCES: PLATYCEPHALIDAE)

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Abstract.—The type specimens of *Platycephalus rodericensis* Cuvier do not agree well with the original description and the name has been applied to several different species. Further, as the types for both *P. rodericensis* and *P. borboniensis* Cuvier represent species that have not been reported in the western Indian Ocean beyond the coast of India or the Persian Gulf, it is unlikely that they came from Reunion Island as stated by Cuvier. Despite the confusion, *P. rodericensis* is here interpreted as the senior synonym of *P. timoriensis* Cuvier, *P. sculptus* Günther, and *Insidiator detrusus* Jordan & Seale. *P. borboniensis* Cuvier is regarded as a junior synonym of *Inegocia japonica* (Tilesius, 1812).

In 1829, Cuvier & Valenciennes published volume 4 of “Histoire Naturelle des Poissons.” Included was a treatment of the Platycephalidae with descriptions of numerous new species. Although most of these species descriptions have been correctly interpreted in the literature, several have caused nomenclatural problems that persist to date. The purpose here is to point out the improper usage of these names in recent publications and to provide clarification of their status.

Based on specimens said to have been collected by Mylius at Île Bourbon (Reunion), Cuvier in Cuvier & Valenciennes (1829:253) described *Platycephalus rodericensis* from syntypes said to be three and one-half pouces in total length (ca. 95 mm). The description also stated that *P. rodericensis* has 12 soft dorsal-fin rays, 12 anal-fin rays, a large, strong preopercular spine, four strong spines on the suborbital ridge, and brown spots on the fins. Sauvage (1873) redescribed *P. rodericensis*, duplicating Cuvier’s description more or less verbatim but adding several additional measurements. He described the spots on the fins as being black rather than brown and selected the larger syntype, “with a length of 105 mm,” as be-

ing “the type of the species.” This qualifies as a lectotype designation. The lectotype retains the original catalog number Muséum National d’Histoire Naturelle (MNHN) 6838 and the paralectotype has been recataloged as MNHN 1992-0002. The total lengths of the two specimens were recorded as 89 and 192 mm by Blanc & Hureau (1968). The putative types differ from Cuvier’s description in several respects. They have 11 (not 12) dorsal-fin rays. Further, the species represented by the putative types of *P. rodericensis* does not have brown spots on the fins and has been found no closer to Reunion Island than the Gulf of Oman and the coast of India. The possibility exists that the original types of *P. rodericensis* were lost and replaced with other specimens. Several searches by me through the general flathead collection at MNHN failed to unearth any specimens that could possibly have been the types.

Despite the apparent discrepancies, I feel that Cuvier’s description of *P. rodericensis* was probably based on the putative types. The body length measurement (ca. 95 mm) given by Cuvier is reasonably close to the total lengths of the MNHN types. In looking at Cuvier’s descriptions of other new flat-

heads, he frequently differed in fin-ray counts from the counts that I have taken from his type specimens so a difference of one dorsal-fin ray is not unexpected. Explaining away the lack of dark spots in the fins is more difficult. The spinous dorsal fin of the species represented by the types of *P. rodericensis* can have two rather large blotches but the other fins are unspotted, being primarily dusky.

Part of Cuvier's description of *P. rodericensis* (large preopercular spine, four strong spines on the suborbital ridge, lateral line scales with small spines on anterior part of the body) fits either the types or another species currently referred to as *Suggrundus macracanthus* Bleeker, 1869. Like *P. rodericensis*, *S. macracanthus* is known from the northern Indian Ocean, but has not been reported from as far south as Reunion Island. The latter species has 12 soft dorsal-fin rays, well-developed dark spots in the fins and has been identified as *P. rodericensis* by Troschel (1840) and de Beaufort (1962), *Repotrudis rodericensis* by Kuronuma & Abe (1986), and *Suggrundus rodericensis* by Shao & Chen (1987).

I regard as significant Cuvier's statement that the interorbital space of *P. rodericensis* is narrow, going three times or less into the vertical eye diameter. This agrees with the condition that I found in the MNHN types. The same measurement in *S. macracanthus* goes twice or less in the vertical eye diameter and is a good character for separating the two species. Although the evidence is not entirely supportive, I believe that Cuvier did describe *P. rodericensis* from the putative types, with the mention of spots in the fins apparently being erroneous.

In addition to the features of the syntypes of *P. rodericensis* given above, the presence of a finger-like subopercular flap, pored lateral-line scales each with a single pore opening to the exterior, and the configuration of spines and ridges on the head indicate the types of *P. rodericensis* to be the same species as the type specimen of *P. timoriensis*,

a species described by Cuvier on the page following his description of *P. rodericensis*. Cuvier did indeed note some similarities between the two nominal species. A brief synonymy follows.

Suggrundus rodericensis
(Cuvier, 1829)

Platycephalus rodericensis Cuvier in Cuvier & Valenciennes 1829:253 (original description, type locality, Ile Bourbon).—Sauvage, 1873:58 (Ile Bourbon).

Platycephalus timoriensis Cuvier in Cuvier & Valenciennes 1829:254–255 (original description, type locality, Timor).

Platycephalus sculptus Günther, 1880:41–42, pl. XVII, fig. A (original description, type locality, Arafura Sea).—de Beaufort, 1962:148–149 (Arafura Sea).

Insidiator detrusus Jordan & Seale, 1905:15, pl. X (original description, type locality, Hong Kong).

Insidiator macracanthus.—McCulloch, 1914:141–142 (in part) (Bowen, Queensland).

Thysanophrys sculptus.—Kamohara, 1952:106 (Urado and Mimase, Shikoku Prefecture).—Wongratana, 1975:5, pl. I, fig. 3 (Thailand).

Kumococius detrusus.—Matsubara & Ochiai, 1955:92–94, pl. II (Urado, Shikoku Prefecture).—Masuda et al., 1984:322, pl. 289–A,B (Tosa Bay to South China Sea).—Kuronuma & Abe, 1986:80 (Arabian Gulf, Hong Kong and Japan).

Platycephalus bengalensis Rao, 1966:123–127, fig. 1 (original description, type locality, Bay of Bengal).—Talwar & Kacker, 1984:336, fig. 137 (northeast coast of India).

Suggrundus rodericensis.—Knapp, 1983: no pagination (Gulf of Oman to Japan and Australia) (misspelled *rodricensis*).—Gloerfelt-Tarp & Kailola, 1984:123, fig. on 122 (North West Shelf of Arafura Sea).—Sainsbury et al., 1985:118, fig. on 119 (North West Shelf to Arafura Sea).—

Shao & Chen, 1987:82, figs. 13–14 (Indo-Pacific, Philippines, Taiwan to Queensland).—Paxton et al., 1989:471 (off Western Australia and Northern Territory).

Another species described by Cuvier in 1829, *Platycephalus borboniensis*, was also alleged to have been collected at Reunion Island by Mylius. Cuvier's description stated that the holotype was 162 mm in total length (I measure 166 mm), had 13 soft dorsal-fin rays (I count 12) and 12 anal-fin rays, two spines on the suborbital ridge under the eye, two short preopercular spines, and a rather narrow interorbital space. The specimen agrees quite well with the original description and the name appears to be a junior synonym of *Inegocia japonica* (Tilesius, 1812). As the range of *I. japonica* is known from Madras and Sri Lanka to Japan and Australia, Cuvier's Reunion Island record for *P. borboniensis* seems to be in error.

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